

Amendments to the Claims

1-57. (Cancelled)

58. (Currently Amended) A valve for controlling fluid flow, the valve comprising:

a valve housing comprising at least one inlet port and a plurality of outlet ports, including a first outlet port and a second outlet port; and

a valve rotor rotatably disposed within the valve housing;

wherein the valve rotor comprises a ~~plurality of internal fluid passages within the valve rotor to selectively connect, in fluid relationship, at least one inlet port with at least one outlet port~~ first valve portion comprising a first internal fluid passage arrangement and a second valve portion comprising a second internal fluid passage arrangement, the first internal fluid passage arrangement and the second internal fluid passage arrangement being in fluid communication with each other through a first internal fluid passage, the first internal fluid passage arrangement providing fluid communication between at least one inlet port and the first outlet port and between at least one inlet port and the second internal fluid passage arrangement, the second internal fluid passage arrangement at least partially providing fluid communication between at least one inlet port and the second outlet port, the first internal fluid passage arrangement comprising at least one conduit extending transversely across at least a substantial portion of the rotor and operable to direct flow of coolant across the rotor from an inlet port to an outlet port and from the inlet port to the first internal fluid passage which opens into the first internal fluid passage arrangement at a position flowwise between an inlet port and the first outlet port;

wherein the ~~plurality of internal fluid passages comprises a~~ first internal fluid passage ~~[[that]]~~ extends down along a rotational axis of the valve rotor; and

wherein the ~~plurality of internal fluid passages comprises a~~ second internal fluid passage arrangement comprises a pie-shaped fluid passage that extends from the first internal fluid passage to an opening in an outer surface of the valve rotor.

59. (Previously Presented) The valve for controlling fluid flow according to claim 58 wherein at least one inlet port and the plurality of outlet ports of the valve housing are aligned along two axially spaced planes that are substantially perpendicular to the rotational axis of the valve rotor.

In re Application of: Allan McLane et al.
Application No.: 10/605,473

60. (Previously Presented) The valve for controlling fluid flow according to claim 58 wherein the plurality of outlet ports comprises an outlet port formed in the valve housing that is aligned so as to be parallel with the rotational axis of the valve rotor.
61. (Previously Presented) The valve for controlling fluid flow according to claim 58 further comprising:
 - a biasing mechanism to position the valve rotor in a preselected rotational orientation relative to the valve housing.
62. (Previously Presented) The valve for controlling fluid flow according to claim 61 wherein the biasing mechanism comprises a spring.
63. (Previously Presented) The valve for controlling fluid flow according to claim 58 further comprising:
 - a drive mechanism that is operatively connected to the valve rotor for moving the valve rotor to selected rotational orientations within the valve housing.
64. (Previously Presented) The valve for controlling fluid flow according to claim 63 wherein the drive mechanism comprises a motor.
65. (Previously Presented) The valve for controlling fluid flow according to claim 64 wherein the motor comprises a stepper motor.
66. (Previously Presented) The valve for controlling fluid flow according to claim 64 wherein the drive mechanism comprises a motor operatively connected to a reduction gear combination.
67. (Previously Presented) The valve for controlling fluid flow according to claim 58 wherein the plurality of internal fluid passages comprises a second fluid passage that extends from the first fluid passage to at least one opening in an outer surface of the valve rotor.

In re Application of: Allan McLane et al.
Application No.: 10/605,473

68. (Previously Presented) The valve for controlling fluid flow according to claim 58 wherein the plurality of internal fluid passages comprises a plurality of axially extending internal fluid passages located within the valve rotor.
69. (Previously Presented) The valve for controlling fluid flow according to claim 58 wherein the valve rotor and the valve housing are spaced apart to form a gap between the valve rotor and the valve housing to permit fluid flow.
70. (Previously Presented) The valve for controlling fluid flow according to claim 69 further comprising:
 - at least one flexible seal between the valve rotor and the inlet port; and
 - at least one flexible seal between the valve rotor and at least one outlet port to prevent fluid from flowing into the gap.

71. (Previously Presented) A valve for controlling fluid flow, the valve comprising:

a valve housing comprising a bottom portion, at least one inlet port, and a plurality of outlet ports, wherein the inlet port and at least one outlet port are substantially located in a first plane, wherein at least one outlet port is substantially located in a second plane, wherein at least one outlet port is located on the bottom portion of the valve housing, wherein the first plane and the second plane are substantially perpendicular to a rotational axis of a valve rotor, and wherein the first plane and the second plane are axially spaced from each other;

the valve rotor rotatably disposed within the valve housing, wherein the valve rotor comprises a plurality of internal fluid passages within the valve rotor to selectively connect, in fluid relationship, the inlet port with at least one outlet port; and

a biasing mechanism disposed about a shaft of the valve rotor to position the valve rotor in a preselected rotational orientation relative to the valve housing;

wherein the plurality of internal fluid passages comprises a first fluid passage that extends down along the rotational axis of the valve rotor;

wherein the plurality of internal fluid passages comprises a second fluid passage from the first fluid passage to a first surface opening in the valve rotor in the first plane;

wherein the plurality of internal fluid passages comprises a third fluid passage from the first fluid passage to a second surface opening in the valve rotor in the first plane;

wherein the plurality of internal fluid passages comprises a fourth fluid passage from the first fluid passage to a third surface opening in the valve rotor in the first plane;

wherein the plurality of internal fluid passages comprises a fifth fluid passage from the first fluid passage to a fourth surface opening in the valve rotor in the second plane;

wherein the plurality of internal fluid passages comprises a sixth fluid passage from the fifth fluid passage to a fifth surface opening in the bottom portion of the valve rotor; and

wherein the sixth fluid passage comprises dual fluid passages that extend from the fifth fluid passage to dual grooved openings in the bottom portion of the valve rotor.

In re Application of: Allan McLane et al.
Application No.: 10/605,473

- 72. (Previously Presented) The valve for controlling fluid flow according to claim 71 wherein the valve rotor and the valve housing are spaced apart to form a gap;
- wherein the valve further comprises a first flexible seal between the valve rotor and the inlet port; and
- wherein the valve further comprises a second flexible seal between the valve rotor and at least one outlet port to prevent fluid from flowing into the gap.
-